DAVIS

VOICINGS

FOR JAZZ KEYBOARD

by FRANK MANTOOTH

A comprehensive approach
to contemporary
keyboard voicings for the
PERFORMER
ARRANGER
TEACHER
JAZZ THEORIST

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Home Office:
960 East Mark Street
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Chapter 2: GENERIC VOICINGS

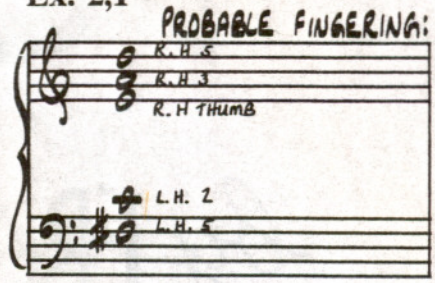
(and the "Rule of Thumb")

Generic Voicings are five-note chord constructions which function for three basic chord families: major, minor, and dominant. They are simple to assimilate, easy to play, and avoid tertiality (see Glossary) while still accommodating the desired harmony.

The Rule of Thumb

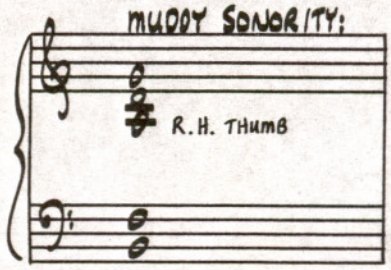
Generally, with 5-voice chord constructions, the top three voices are played by the right hand, the lower two voices by the left. See Ex. 2,1.

Ex. 2,1



In order to produce the strongest, most resonant sonorities, it's advisable to follow the "Rule of Thumb": Keep the right hand thumb in the octave between middle C and C1 (one octave higher). This rule helps players avoid muddy sonorities that can result when the right hand thumb moves below middle C.

Ex. 2,2



Similarly, when the right hand thumb is above C1, the resulting sonority is generally too thin for comping.

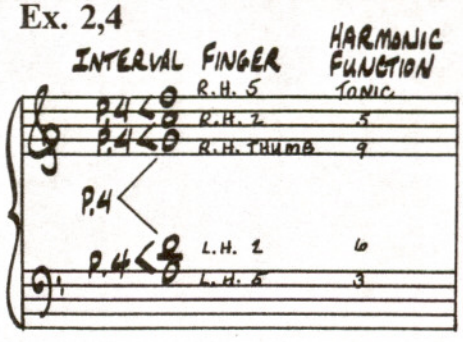
Ex. 2,3

Naturally, certain musical situations may specifically require a higher or lower sonority, but most frequently (particularly when comping), the optimal sonority will be obtained when the "Rule of Thumb" is intact.

Generic voicings relegate all major family chords into the category, "Generic Major". Major family chords include Major triads, Major Sixths, Major Sevenths, Major Ninths, and 6/9 chords.

Application: After determining that a chord does indeed belong to the major family, proceed as follows: First, place, the right hand fifth finger on the root of the chord and the second (or third) finger a perfect fourth lower. Then place the right hand thumb a perfect fourth lower. With the left hand, place the second finger a perfect fourth lower than the right hand thumb and the left hand fifth finger a perfect fourth below that. The result is a five-voice construction built entirely of perfect fourths.

Ex. 2,4

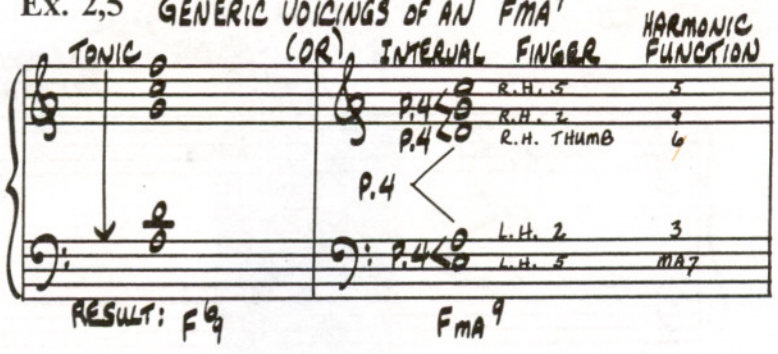


As an example, let's say we see an FMa9 on a chart with no suggested voicing offered. The FMa9 obviously belongs to the major family, so we put our right hand fifth finger on the tonic and proceed as follows:

Due to the absence of the Major Seventh, the resulting chord is actually an F6/9. Theoretically, we do not have an exact FMa9; however, there are no offensive chord tones, tertiality has been avoided (in this case, restructured), and the right thumb is between middle C and C1. The chord is in the best position on the keyboard for sonority, and most important, the system works.

Generic Major voicings can also be constructed from the fifth scale tone of a given harmony descending in perfect fourths in a similar fashion as those constructed from the tonic down. For example, our FMa9 can be voiced in two ways:

Ex. 2,5 GENERIC VOICINGS OF AN FMA9



With the generic construction descending from the fifth scale degree, we achieve an exact FMa9, but the point to be stressed is that either voicing is sufficient and context determines which we would use.

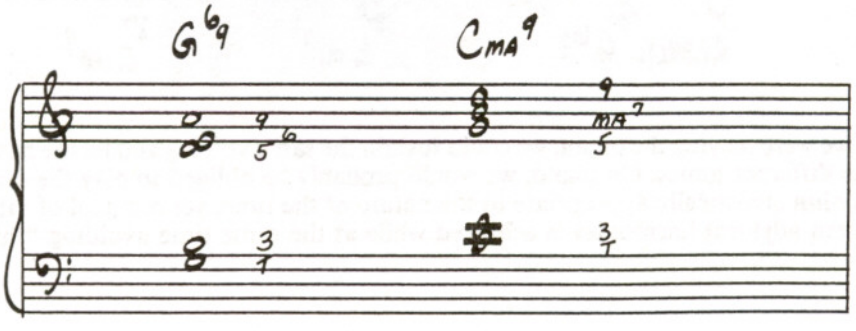
Let's observe the cyclical progression IMa - IVMa in the key of G: GMa7 - CMa7.

If we generically construct the G Major voicing from the tonic descending, and the C Major voicing from the fifth descending we derive the identical voicing.

Ex. 2,6

Obviously these constructions would similarly function for any two major harmonies whose respective tonics are a fourth apart (e.g. EMa7 - AMa7, DbMa9 - GbMa9). Since the voicings are identical, voice leading has been minimized (in fact, eliminated), the "Rule of Thumb" has been observed for the sake of sonority, and the resultant voicings sound seemingly more sophisticated than the "third city" (see Glossary) rendition of the same progression.

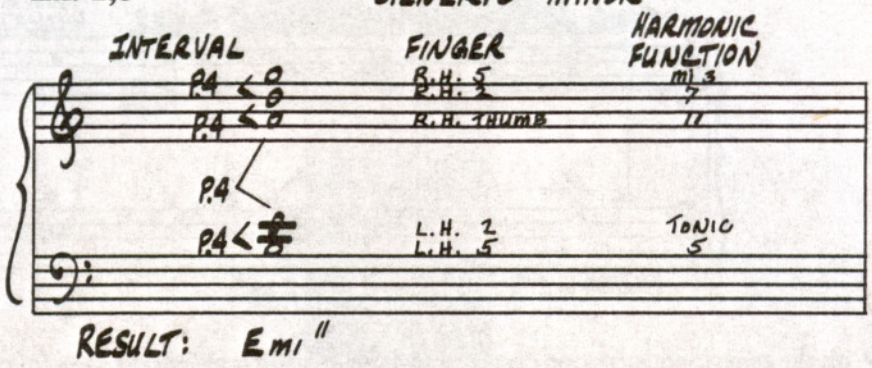
Ex. 2,7 YE OLDE THIRD-CITY RENDITION OF G6/9 - CMA9



The generic minor voicing serves the following minor family harmonies: minor triads, minor sixth, minor seventh, minor ninth, minor eleventh, and minor thirteenth chords. To construct the generic minor voicing, place the right hand fifth finger on the minor third and, following the format for generic major voicings, use descending intervals of the perfect fourth to construct the five-note chord.

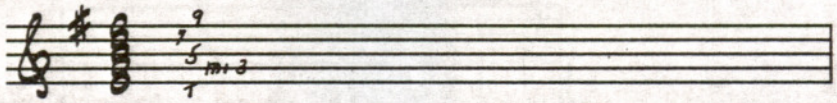
For an EMi9, we would start with the minor third and proceed as follows.

Ex. 2,8 GENERIC MINOR



The chord produced is really an EMi11, a rough approximation of an EMi9, because the 9th is absent. Again, however, there are no offending chord tones, the "Rule of Thumb" is intact, and the resulting sound is tastier than the usual tertial (see Glossary) rendition of EMi9.

Ex. 2,9 YE OLDE "THIRD CITY" RENDITION OF AN Emi9



Let's now look at the progression, GMa7, EMi7, CMa7, or analyzed in terms of diatonic scale steps, IMa7, vi7, IVMa7. If we use generic voicings as follows, we can use the same 5-note construction for all three harmonies. The sound of each will be different as the bassist supplies the different tonics.

Ex. 2,10 GENERIC VOICINGS FOR GMa7, Emi7, CMa7

If we were playing the organ, we could sustain the same voicing and let the bassist "walk" across the different tonics. On piano, we would probably be obliged to play the same voicing with a rhythm stylistically appropriate to the nature of the tune, yet our goal of minimal motion between adjacent harmonies is achieved while at the same time avoiding "third city".

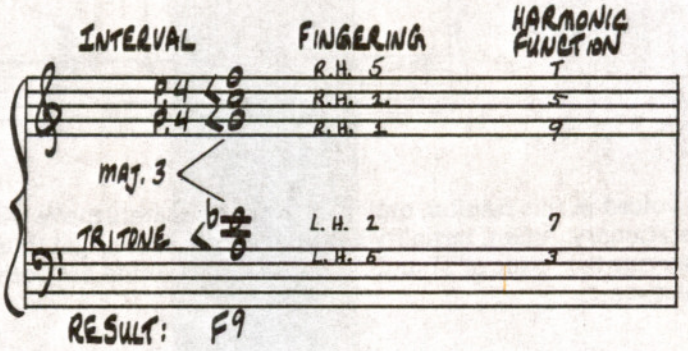
Generic Dominant Family Chords

Generic Dominant voicings function for sevenths, ninths, and thirteenth chords.

Building this category of chords requires a little more thought. The right hand begins as with generic major construction: Perfect fourths descending from the tonic or fifth of the given tonality. However, the left hand doesn't continue in fourths, but rather, plays the third and seventh of the dominant chord. The third and seventh are the most crucial tonal indicators of all the diatonic steps.

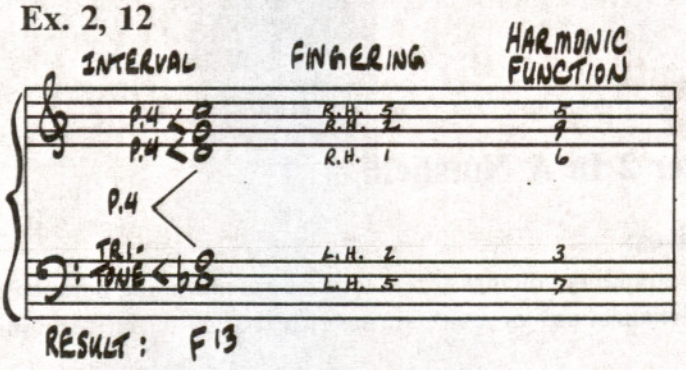
For example, to play a F9 (or seventh or thirteenth), place the right hand fifth finger on the tonic and proceed as follows:

Ex. 2,11 GENERIC DOMINANT VOICINGS



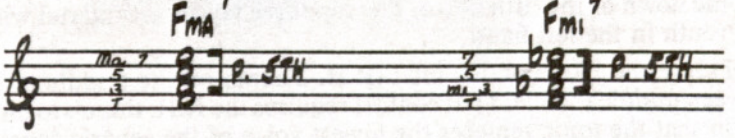
Similarly, the dominants, like the majors, can be constructed from the fifth descending.

Ex. 2, 12



Note that the tritone between 3rd and 7th signals solely the dominant tonality. The interval between the third and the seventh of major and minor family chords is a perfect fifth.

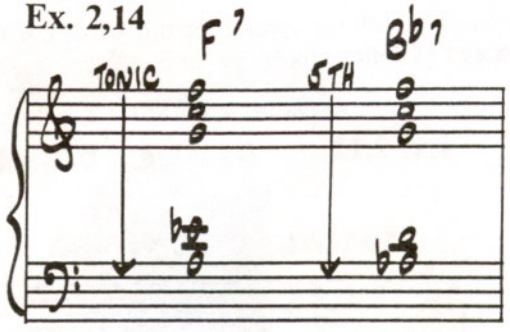
Ex. 2,13



The tritone is reversed with the two different generic dominant constructions; when constructed from the tonic descending, the third is on the bottom. Conversely, when constructed from the fifth descending, the seventh is the lowest voice.

When we approach cyclical dominants, for example F7—B♭7 or I7—IV7, we can construct the F7 from the tonic descending and the B♭7 from the fifth descending to obtain minimal motion between the two voicings.

Ex. 2,14



When voiced in this fashion, only the tritone indicators move while the right hand voices remain stationary. Again, tertiality has been avoided, the right thumb insures optimal sonority by observing the "Rule of Thumb," and minimal motion has been achieved between the adjacent harmonies.

Chapter 2 In A Nutshell:

Objectives:

1. Good sounding voicings that minimize voice leading between two harmonies.
2. "Detertialization" or restructuring of text book tertial harmonies.

Points to Remember

A. All Generic Voicings are 5-note constructions.

B. Generic Majors have two constructions. They may be constructed from either the tonic or the fifth descending in perfect fourths.

C. Generic Minors have one construction: all fourths descending from the minor third.

D. Generic Dominants have two constructions. They may be constructed from either the tonic down or the fifth down. The top three voices are quartal with the 3rd and Dominant seventh in the left hand.

E. Observe the "Rule of Thumb" (R.H. Thumb on the middle of the five tones played between middle C and C1). If context requires the R.H. thumb to dip below Middle C, be certain that the tonic replaces the lowest voice of the generic construction. This will be explained later in more detail.

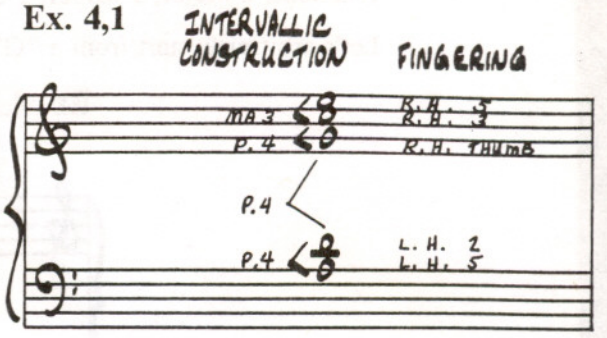
Chapter 4: MIRACLE VOICINGS

You'll find the designation "Miracle Voicing" only in this book. The "miracle" aspect of these voicings is that they each accommodate five different harmonic functions (depending on which tone is used as the tonic), and they help us in our goal of avoiding tertial voicings. Like Generic Voicings, Miracle Voicings are five-note chord constructions.

Miracle Voicing I (M.V.I)

To construct M.V. I, start from any given tone (I've arbitrarily chosen an "E") and descend using the following intervals: Major third, P4th, P4th, P4th.

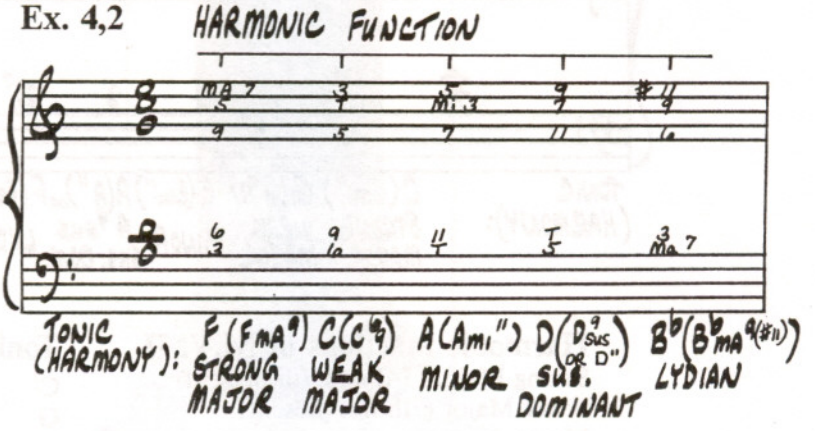
Ex. 4,1



As mentioned, we can use this construction to accommodate five different harmonic functions:

Harmonic functions of Ex. 4,1. (M.V.I)	Tonic
Strong Major (3rd and 7th present)	F
Weak Major (7th not present)	C
Minor	A
Suspended Dominant (11th chord)	D
Lydian	B♭

Ex. 4,2



To locate the tonic to be used for the various harmonic functions, use the following method:

1. The tonic of the strong major function, is ½ step above the top voice. In the case of Ex. 4,1: "F".
2. To find the tonic of the weak major function, use the second voice from the top of the construction as the tonic (root). In this case, "C".
3. The lowest voice in the construction serves as the tonic of the minor function. For Ex. 4,1; "A".
4. To find the tonic of the suspended dominant, or 11th chord function, use the second voice from the bottom.
5. The tonic of the Lydian function is either a tritone from the top voice, or ½ step above the bottom voice. In this case, "B♭".

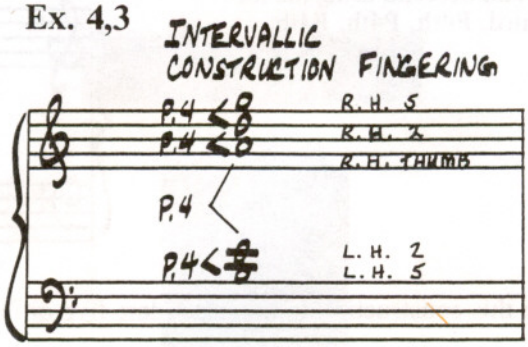
In Lydian harmonies, the ♯4, or ♯11 is the most poignant tone as it is the only scale step which differentiates Major from Lydian.

Miracle Voicing II (M.V.II)

Miracle Voicing II is identical to our old friends, Generic Major and Minor. It is a 5-note construction, built entirely from perfect fourths. Like M.V.I, M.V.II serves five different harmonic functions: 2 Major, 1 Minor, 1 Suspended Dominant, and 1 Lydian.

Let's arbitrarily start from a "G" and descend in fourths as follows.

Ex. 4,3



Let's now find the tonics (roots) of the five different harmonic functions.

Ex. 4,4 HARMONIC FUNCTION

Harmonic functions of M.V. II.	Tonic
Strong Major (3rd and 7th present)	C
Weak Major (7th not present)	G
Minor	E
Suspended Dominant (11th chord)	A
Lydian	F

To locate the tonic of the 5 various harmonic functions, proceed as follows:

1. The top voice is the root of the weak major function. (Identical to Generic Major from the tonic descending). In this case "G".
2. Since the Generic Major voicing from the 5th descending is also identical to M.V. II, the tonic will be a P.4th above the top voice. In this example, "C". This is the strong major function since both the 3rd and 7th are present.
3. The 2nd voice from the bottom is the tonic of the minor function. In this case, "E". This construction is also identical to the Generic Minor with the minor third scale step as the top voice.
4. The middle voice is the tonic of the 11th chord or suspended dominant function. In this example, "A".
5. The root of the Lydian function is a tri-tone from the bottom voice. In this case, "F".

Note that for M.V. I the tonic of the Lydian function is a tritone from the top voice. Conversely, for M.V. II, the tonic of the Lydian function is a tritone from the bottom voice.

Chapter 6: VOICING SUSPENDED AND ALTERED DOMINANT CHORDS AS POLYCHORD FRACTIONS

Don't be intimidated by the title of this chapter. The concept here is as easy to assimilate as Generic and Miracle Voicings were in the previous chapters. Let's begin by redefining the terms used:

1. Dominant family chords: 7ths, 9ths, and 13ths. (11th chords are unique because in application the third is replaced by the 4th or 11th scale tone).
2. Alterations are diatonic scale tones which are chromatically raised or lowered (altered) to create new sounds or "tensions". Alterations to be covered: ♭5, or ♯11, ♯5 or ♭13, ♭9, ♯9, and possible combinations of altered tones, for ex. (♭9/♭5).
3. To voice these altered dominants we're going to think of two harmonies stacked one on top of the other like a fraction:

numerator	=	II	=	G
denominator		17		F7

General information and explanation of symbols used

1. "x" is any given tonality, e.g., F, B, E♭, etc.
2. The Roman numerals in the fraction refer to the **major** scale steps of the "x" tonality.
3. Tritone indicators for dominant family chords are Ma 3rd and dominant seventh (the interval between these two tones is a tritone) with the exception of 11th chords (suspended dominant chords) where the third is absent. The Ma3rd and dominant 7th are the only mandatory chord tones for the denominator, or bottom half of the polychord fraction.
4. The "numerator" triad on top is always a major triad, and any inversion, i.e. root position, first inversion, or second inversion is equally functional as the "numerator" or top half of the polychord fraction.
5. Only in rare instances may we not take the liberty to consider 7th, 9ths, and 13ths as interchangeable. In other words, when we see a chord symbol designation of a 7th, the ninth or sixth (13th) may be added in performance thereby enhancing, not detracting, from the chord quality.

Let's start with the one exception, the 11th chord (or suspended dominant).

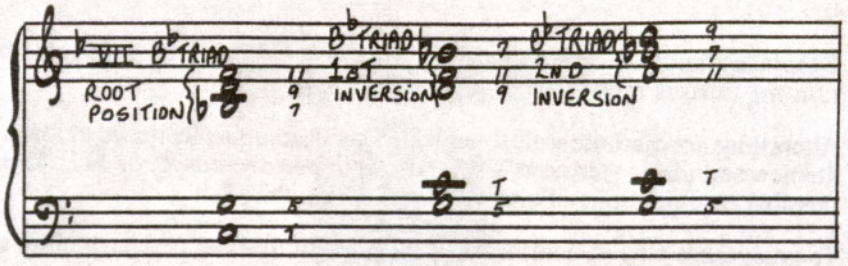
Desired harmony	Fraction	Example	Implementation
I. x11 or x7sus	$\frac{\flat VII}{I}$	**C11**	$\frac{B\flat}{C}$

This harmony is the one exception for two reasons:

1. It is not an altered harmony. All chord tones are in the Mixolydian diatonic system.
2. The third is not used in application, hence the tritone indicators for the denominator are not applicable.

However, conceptualizing the 11th chord as $^{\flat VII}_{I}$ instantly gives us the best voicing. In the case of C11, because the third is deleted and the seventh is already present in the numerator triad, the obvious choices for the two representative tones of denominator are the tonic and fifth.

Ex. 6,1 C11 OR $C^{9\,SUS}\left(\frac{\flat VII}{I}\right)$



Note in Ex. VI.1. that all inversions of the major triad based on the ♭VII scale step (B♭) are equally functional. In order to keep all voices as compact as possible, it is sometimes necessary to reverse the tonic and fifth in the left hand. Note that in the 1st and 2nd inversion spellings of Ex. 6,1, the tonic is now above the fifth in the left hand. Wide intervallic "gaps" between the two hands should be avoided in the interest of sonority.

Example 6,2 lists the polychord fractions to be used for other altered dominant chords.

Ex. 6,2 POLYCHORD FRACTIONS FOR ALTERED DOMINANTS:

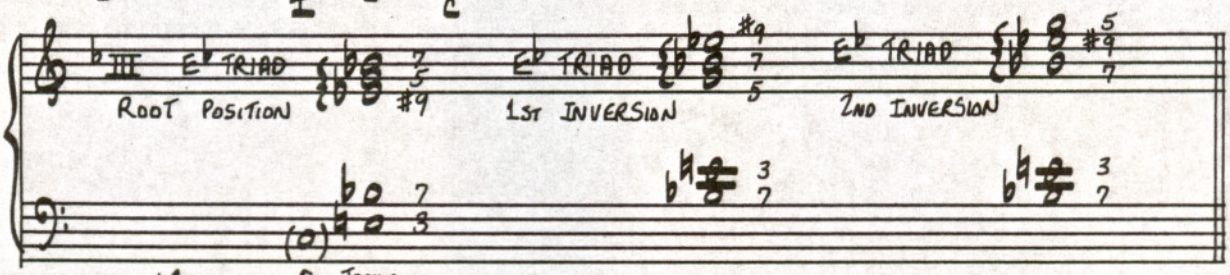
	DESIRED HARMONY	FRACTION	EXAMPLE	IMPLEMENTATION
A.	$X^{7(\flat5)}$ OR $X^{13(\sharp11)}$	$\frac{II}{I7}$	$C^{13(\sharp11)}$	$\frac{D}{C7}$
B.	$X^{7(\sharp9)}$	$\frac{\flat III}{I}$	$C^{7(\sharp9)}$	$\frac{E\flat}{C}$
C.	$X^{7\left(\frac{\flat9}{\flat5}\right)}$	$\frac{\flat V}{I}$	$C^{7\left(\frac{\flat9}{\flat5}\right)}$	$\frac{G\flat}{C}$
D.	$X^{13(\flat9)}$	$\frac{VI}{I7}$	$C^{13(\flat9)}$	$\frac{A}{C7}$
E.	$X^{7\left(\frac{\sharp9}{\sharp5}\right)}$ OR $X_{+}^{7(\sharp9)}$	$\frac{\flat VI}{I7}$	$C_{+}^{7(\sharp9)}$	$\frac{A\flat}{C7}$

"C" has arbitrarily chosen as the x tonality since most of us first learned the C scale and therefore feel at home in "C".

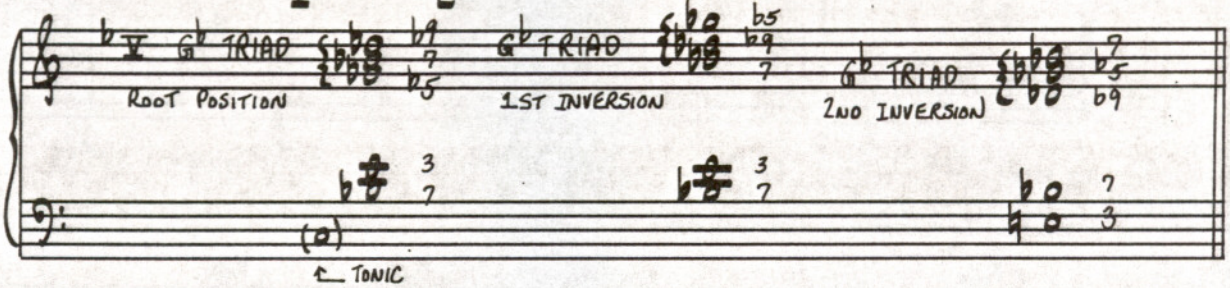
Ex. 6,3

a. $C^{13}(\#11) = \frac{II}{I^7} = \frac{D}{C^7}$

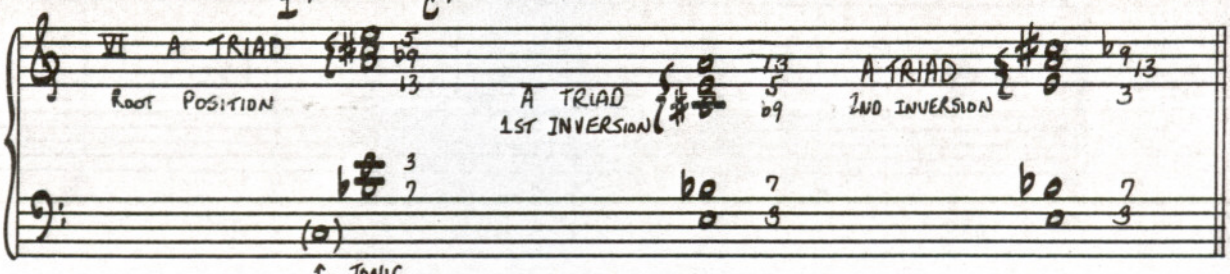
b. $C^7(\#9) = \frac{\flat III}{I} = \frac{E\flat}{C}$



c. $C^7(\frac{\flat 9}{\flat 5}) = \frac{\flat V}{I} = \frac{G\flat}{C}$



d. $C^{13}(\flat 9) = \frac{VI}{I^7} = \frac{A}{C^7}$



e. $C_+^7(\#9) = \frac{\flat VI}{I^7} = \frac{A\flat}{C^7}$

Chapter 8: VOICINGS FOR THE BLUES AND OTHER COMMON PROGRESSIONS

Let's now use combinations of Generic Voicings, Miracle Voicings, and Polychord Fractions to voice various blues progressions. We can play the basic blues in "A♭" (three chord progression) with only generic dominants.

Please note that some rhythmic ingenuity must be employed by the jazz pianist with the suggested voicings, rather than simply playing each voicing religiously in each bar on beat one. Comping repeatedly on beat one is one of those unwritten cardinal sins and is guaranteed to annoy your colleagues on the band stand. Listen to the respected masters of the art of comping, e.g. Wynton Kelly, Red Garland, Kenny Drew, Herbie Hancock, to mention a few, in order to familiarize yourself with styllistically correct comping.

Ex. 8,1

Practice Ex. 8,1 and all subsequent exercises in all twelve keys.

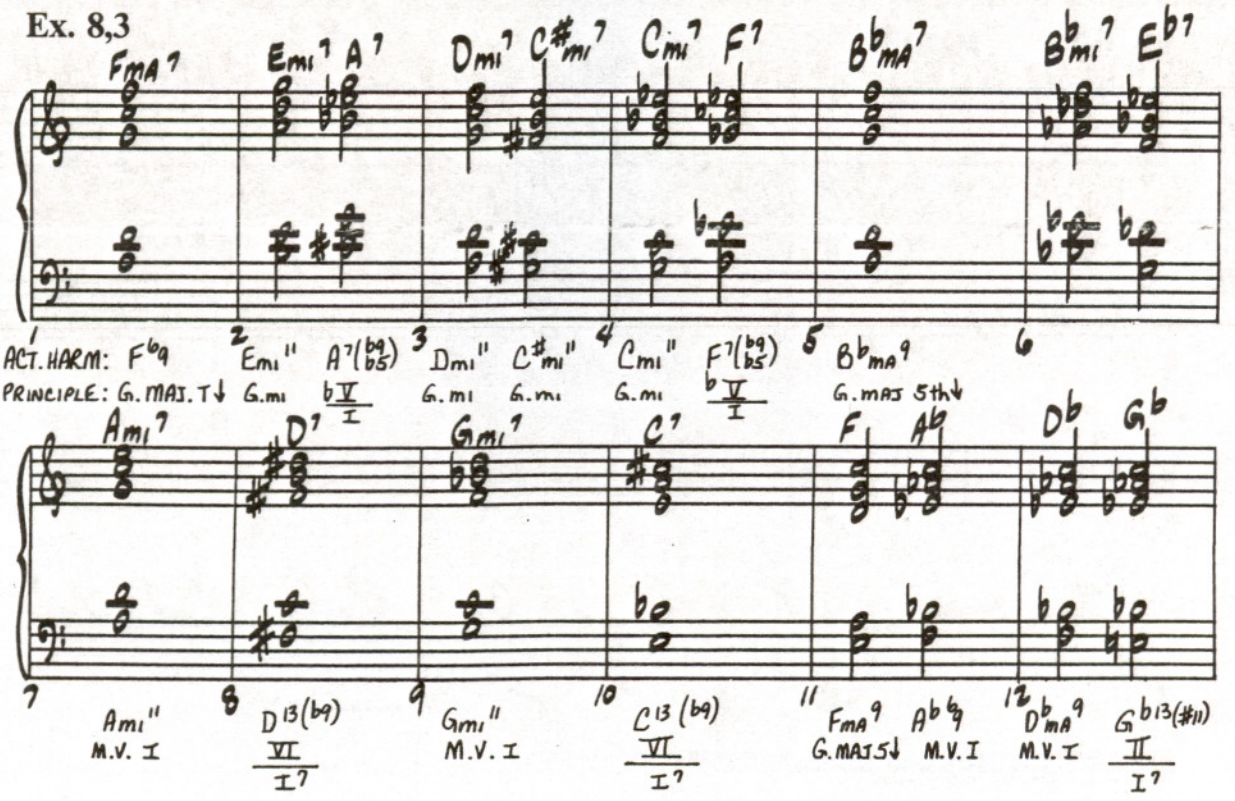
Ex. 8,2 is a blues progression in Eb with more variety than the basic three chord version shown in Ex. 8,1.

Ex. 8,2

Note that beginning in bar 7 we have the cyclical changes, I - VI - II - V - I - 𝄎 with bars 8-10 using altered or suspended dominants. More importantly, notice that the soprano voice remains unchanged (glued) throughout the entire progression.

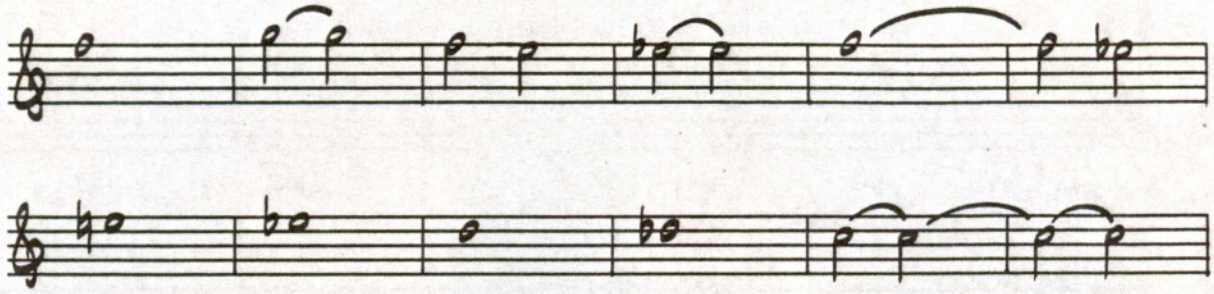
Ex. 8,3 alters the blues progression even more with alternate II-V's and the "Coltrane turnaround" (I - bIII - bVI - bII) in the last two bars.

Ex. 8,3


FMA7 Emi7 A7 Dmi7 C#mi7 Cmi7 F7 BbMA7 Bbmi7 Eb7
ACT. HARM: Fb9 Emi11 A7(b9 b5) Dmi11 C#mi11 Cmi11 F7(b9 b5) BbMA9
PRINCIPLE: G. MAJ. T↓ G.mi bV/I G.mi G.mi G.mi bV/I G.MAJ 5th↓
Ami7 D7 Gmi7 C7 F Ab Db Gb
Ami11 D13(b9) Gmi11 C13(b9) FMA9 Ab b9 DbMA9 Gb13(#11)
M.V. I VI/I7 M.V. I VI/I7 G.MAJ5↓ M.V. I M.V. I II/I7

Notice that the voicings of the chords in progression 8,3 move with minimal motion between adjacent harmonies and that the "Rule of Thumb" is in effect. Observe another prerequisite for successful comping: the logical melodic contour of the soprano voice. By tying all identical adjacent soprano notes, we derive the following:

Ex. 8,4



There are numerous other blues progressions. A Dan Haerle handout lists 16 Blues progressions with the footnote "Portions of these progressions could be combined with each other to combine hundreds of slight variations of the above." However, as long as we're aware of minimal motion, "Rule of Thumb", and the new concept of melodic soprano voice leading, there's no ground for anxiety even if there were one million possible blues progressions. We would just simply and logically use our harmonic vocabulary (Generic Voicings, Miracle Voicings, and Polychord Fractions) to accomodate the desired harmonies.

Let's now tackle the project of comping for a tune which doesn't use a blues progression, Tad Dameron's **Ladybyrd**.

Ex. 8,5 "LADYBYRD" By Tad Dameron

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Ex. 8,6 offers a successful way of voicing the chord symbols to **Ladybyrd.**

Bear in mind that songs in lead sheet form – a single line melody with accompanying chord symbols, generally employ the simplest harmonic possibility for the chord symbol. It is therefore the pianist's option, if not responsibility, to embellish or sophisticate the given harmony. Of course, consideration must be given to the melody. The pianist may add extensions or altered tones only to the extent that they do not clash with the melody.

Ex. 8,6. POSSIBLE VOICINGS FOR "LADYBYRD" By Tad Dameron

GIVEN: CMA7 FMI7 B♭7 CMA7 B♭MI7 E♭7
1 2 3 4 5 6 7 8
ACTUAL HARM: CMA9 FMI11 B♭13(♯9) C69 B♭MI11 E♭9(♯11)
PRINCIPLE: M.V. I M.V. I II V7 M.V. II OR G.MAJ. G. MI II V7
A♭ AMI7 D7 DMI7 G7 CMA7 E♭MA7 A♭MA7 D♭MA7
9 10 11 12 13 14 15 16
A♭MA9 AMI11 D9 G9SUS G13(♭9) CMA9 E♭MA9 A♭69 D♭13(♯11)
G. MAJ. 5th↓ M.V. I G.Dom.T↓ ♭VII I(G) ♭VI V7 M.V.I G.MAJ 5↓ M.V.I II V7

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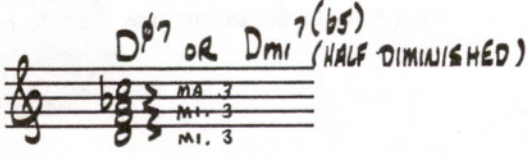
Chapter 9: VOICINGS FOR DIMINISHED AND HALF-DIMINISHED SEVENTH CHORDS

The principles of quartal chord construction are obviously impossible to implement with harmonies whose basic intervallic building block is the minor third.

Ex. 9,1a

b.

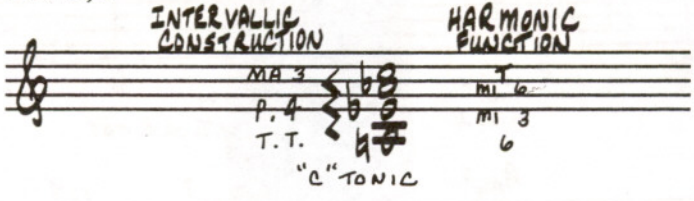


Therefore, a return to third city (tertial construction) is necessary to voice diminished and half-diminished seventh chords. There are, however, ways to restructure these harmonies so that when voiced, the sound is palatable and avoids the strict succession of stacked thirds.

For fully diminished sevenths, an alternative voicing is constructed as follows:

With the tonic note on top, form a major triad in second inversion. Add the tone a tritone lower than bottom voice of the inverted triad to supply a fourth voice. This is a 4-voice construction.

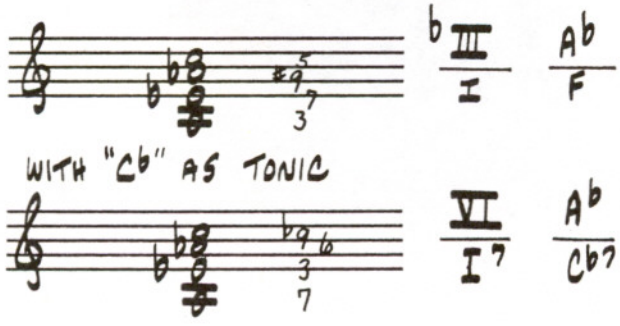
Ex. 9,2



If we consider the top voice of Ex. 9,2 as the tonic, the second voice is indeed a non-chordal tone, having nothing to do with the parent scale, C diminished. It is rather the construction of this chord, i.e., the second inversion major triad over the tritone, plus the presence of both the A and A♭ which gives it a distinctive sonority.

Coincidentally, if analyzed with the tone "F" as the tonic, we have the altered dominant, F7(♯9), or $\frac{\flat III}{I}$. This construction also serves "B" or "C♭" as a 13(♭9), or $\frac{VI}{I7}$.

Ex. 9,3 SAME CONSTRUCTION WITH "F" AS TONIC.



How you choose to perceive this chord mathematically or intellectually is, however, not the issue. Simply stated, it sounds good in a diminished context. Let's use this construction in context of a standard tune, Jobim's "Wave".

Ex. 9,4 "WAVE" By Antonio Carlos Jobim

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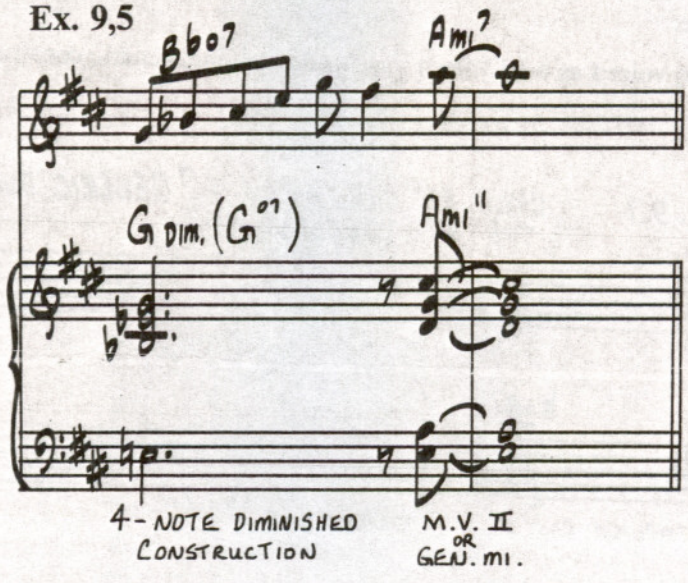
In example 9,4, I've constructed our diminished voicing (Ex. 9,4) from the "G" descending in the second complete bar, and sequenced this voicing at the interval of a minor third to move parallel with the melody. If tempo should make execution of this bar hazardous or impossible, a simpler solution would be:

Ex. 9,5



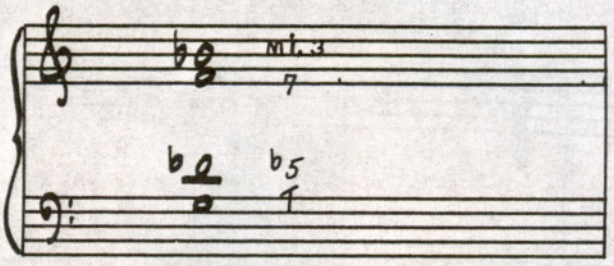
As in the case of strict tertial diminished seventh chords (Ex. 9,1a), our diminished construction can be inverted at the interval of a minor third. In other words, the following diminished constructions patterned after Ex. 9,2 are interchangeable.

$$G^{o7} = B^{\flat o7} = C^{\sharp o7} = E^{o7}$$
$$F^{\sharp o7} = A^{o7} = C^{o7} = E^{\flat o7}$$
$$F^{o7} = A^{\flat o7} = B^{o7} = D^{o7}$$

The sonority of half diminished seventh chords can also be improved by avoiding a strict succession of the thirds. An alternative voicing:

Mi3
7
b5
Tonic

Ex. 9,6 $G\phi^7$ OR $Gmi^7(b5)$



This construction extracts the third from the triad and puts it in the soprano. This spreads out the sonority and avoids stacked thirds.

Another alternative is to voice the $G^{\phi 7}$ as an Eb13 with the tonic omitted. The mathematical relationship is as follows: The tonic of the half diminished chord becomes the third of the dominant 13th.

For example:

$A^{\phi 7}$ could be voiced as a F13 from the 5th descending, generic construction.

Ex. 9,7 COULD BE VOICED AS AN F^{13} GENERIC DOMINANT FROM THE 5th DESCENDING.